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Erratum

Erratum to: "Lattice HQET with exponentially improved statistical precision" [Phys. Lett. B 581 (2004) 93]

ALPHA Collaboration

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We found an error in the 1-loop computation cited as Ref. [14]. Consequently, Eqs. (14), (15) should read

$$c_{\mathrm{A}}^{\mathrm{stat}} = 0.0072(4)g_0^2 + \mathrm{O}(g_0^4), \quad \text{for } S_{\mathrm{h}} = S_{\mathrm{h}}^{\mathrm{S}}, S_{\mathrm{h}}^{\mathrm{A}},$$
$$c_{\mathrm{A}}^{\mathrm{stat}} = 0.0385(37)g_0^2 + \mathrm{O}(g_0^4), \quad \text{for } S_{\mathrm{h}} = S_{\mathrm{h}}^{\mathrm{HYP}}.$$

This propagates into some of the numerical results, with changes of at most one standard deviation. They are not visible in Fig. 1. Table 1 should be replaced by the one included below (only $r_0^{3/2}\Phi_{\mathrm{RGI}}$ is changed).

Eq. (22) should read

$$r_0^{3/2}\Phi_{\mathrm{RGI}} = 1.78(13).$$

The numerical change is irrelevant in the estimate for the B_s decay constant Eq. (24).

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Table 1
Decay constant in static approximation for action $S_h = S_h^{HYP}$

						$r_0^{3/2}\Phi_{RGI}$			
β	a [fm]	L/a	T/a	T'/a	x_0/a	Ω_1	Ω_2	α	α'
6.0	0.093	16	24	24	12	1.830(31)	**1.832(30)**	0.278	−0.200
6.0	0.093	16	24	20	12	1.847(18)	1.830(17)	0.278	−0.200
6.0	0.093	16	24	24	10	1.818(31)	1.828(30)	0.278	−0.200
6.0	0.093	16	24	20	10	1.851(17)	1.829(17)	0.278	−0.200
6.1	0.079	24	30	30	15	1.864(56)	**1.858(52)**	0.756	0.022
6.1	0.079	24	30	30	12	1.850(56)	1.846(52)	0.756	0.022
6.2	0.068	24	36	36	18	1.724(78)	**1.760(75)**	0.351	−0.176
6.2	0.068	24	36	36	15	1.726(78)	1.763(76)	0.351	−0.176